



U.S. Fish & Wildlife Service

Facts and Q&A About the Proposed Critical Habitat Designation for Four Species of Freshwater Shrimp and Eleven Vernal Pool Plants

Vernal Pools:

Vernal pools are seasonally flooded depressions found on soils with an impermeable layer such as a hardpan, claypan or volcanic basalt. The impermeable layer allows the pools to fill with water during the winter rains. Vernal pools often fill and empty several times during the rainy season. In the spring, wildflowers grow in colorful circles following the receding shoreline of the pools. By early summer, the water has evaporated and the pools appear brown and barren. Only plants and animals that are adapted to this cycle of wetting and drying can survive in vernal pools over time.

Vernal Pool Crustaceans:

Fairy shrimp have delicate elongated bodies, large stalked compound eyes and 11 pairs of swimming legs. They swim or glide gracefully upside-down by means of complex beating movements of the legs that pass back and forth in a wave-like manner. They feed on algae, bacteria, protozoa and bits of detritus. Females carry their eggs in a brood sac on their abdomen. Eggs are either dropped to the pool bottom or remain in the brood sac until the female dies and

sinks. Eggs containing dormant embryos are known as cysts and are capable of withstanding heat, cold and prolonged dry periods. The cyst bank in the soil may contain cysts from several years of breeding. As the vernal pools refill with rainwater, in the same or subsequent seasons, some of the cysts may hatch. Early stages of the fairy shrimp develop rapidly into adults. These adult populations often disappear early in the season long before the vernal pools dry up

Conservancy fairy shrimp (*Branchinecta conservatio*) were federally listed as an endangered species in 1994. They range in size from 0.6 to 1.1 inch long. They are often found in vernal pools with highly turbid water. This species is known from only eight populations: Vina Plains and vicinity in southern Tehama and northern Butte counties; Jepson Prairie in Solano County; Sacramento National Wildlife Refuge in Glenn County; near Haystack Mountain in Merced County; near Caswell Memorial State Park in Stanislaus County; San Luis National Wildlife Refuge in central Merced County; Suisun Slough in southern Solano County; and the Mutau Flat area in the Los Padres National Forest area of northern Ventura County. Pools inhabited by the Conservancy fairy shrimp are large, such as the 89-acre Olcott

Lake at Jepson Prairie. Conservancy fairy shrimp have been observed from November to early April.

Longhorn fairy shrimp (*Branchinecta longiantenna*) were listed as an endangered species in 1994. The longhorn fairy shrimp is named for its long antennae. Longhorn fairy shrimp are extremely rare and are known from only a small number of widely separated populations. The three locations where populations occur are: the Kellogg Creek watershed and Altamont Pass area in Contra Costa and Alameda counties; the western and northern boundaries of Soda Lake on the Carrizo Plain in San Luis Obispo County; and Kesterson National Wildlife Refuge in the San Joaquin Valley in Merced County. Longhorn fairy shrimp have been observed from late December to late April.

Vernal pool fairy shrimp (*Branchinecta lynchi*) were listed as a threatened species in 1994. Vernal pool fairy shrimp can be distinguished from other fairy shrimp by the presence and size of several bulges on the male's antenna and by the female's short, pear-shaped brood pouch. Vernal pool fairy shrimp can be found across the Central Valley of California from Shasta County to Tulare County and the central and southern coast ranges from northern Solano County to Ventura County. Additional populations have been found in southern California. In Oregon, vernal pool fairy shrimp are only found in a 32-square mile area known as the Agate Desert in Jackson County, north of Medford. Although the vernal pool fairy shrimp is distributed more widely than most other fairy shrimp species, it is generally uncommon throughout its range and rarely abundant where it does occur.

Vernal pool tadpole shrimp (*Lepidurus packardii*) have a carapace, or shell, that covers most of their body in a manner similar to a horseshoe crab. They also grow larger than fairy shrimp, and can sometimes reach over

three inches in length. Rather than filtering food bits out of the water, tadpole shrimp swim along the bottom and forage for bits of detritus. They also prey on living organisms, including fairy shrimp. They swim rightside up, rather than on their backs, and can produce multiple generations in a single wet season. They form cysts to survive dry periods, just as fairy shrimp do.

Vernal pool tadpole shrimp were federally listed as endangered in 1994. Vernal pool tadpole shrimp can be found in the Central Valley and San Francisco Bay Area, from Shasta County to northern Tulare County and in the central coast range from Solano County to Alameda County.

Vernal Pool Plants:

Succulent owl's clover (*Castilleja campestris* ssp. *succulenta*), also known as fleshy owl's clover, was listed as a federally threatened species in 1997. It is an annual herb in the snapdragon family. The stems are usually unbranched, hairless and may be up to 11.8 inches tall. The upper leaves are thick, fleshy, brittle and easily broken. The flowers are bright yellow to white and appear in April and May.

Succulent owl's clover is known from vernal pool habitats along the southern Sierra foothills ranging from Madera County to northern San Joaquin County. The highest density of occurrences of succulent owl's clover occurs in Merced County, but the species is also known in Fresno, Madera, Stanislaus and San Joaquin counties.

Hoover's spurge (*Chamaesyce hooveri*) trails along the ground, forming gray-green mats from a few inches to a few feet across. The stems are hairless and contain milky sap. The flowering structures in Hoover's spurge consist of a small (0.08 inch) cuplike structure located between each pair of leaves. Each cup contains five clusters of male flowers and a single female flower. None of the flowers have petals, but

white appendages on the sides of the cup resemble petals. The cups also have four reddish glands along their margins. Blooms appear in May through July in Merced and Tulare counties and from June through October in Stanislaus County and the Sacramento Valley.

Hoover's spurge apparently prefers relatively large, deep pools because the duration of inundation is longer. In these deeper pools, competition from other plants has been greatly reduced.

Hoover's spurge was federally listed as threatened in 1997. Hoover's spurge can be found in Tulare, Tehama, Butte, Merced, Stanislaus and Glenn counties.

Contra Costa goldfields (*Lasthenia conjugens*), a showy spring annual with yellow flowers, was listed as an endangered species in 1997. In the aster family, Contra Costa goldfields grows 4 to 12 inches tall and usually has a branched stem. The leaves are light green and feather-like. Daisy-like flowers bloom from March to June.

Contra Costa goldfields can still be found in all areas where it occurred historically, except for the Santa Barbara area. It is found in Solano, Monterey, Alameda, Mendocino, Napa and Contra Costa counties.

Butte County meadowfoam (*Limnanthes floccosa* ssp. *californica*) was listed as an endangered species in June of 1992. It is a small annual herb with erect stems that range from 1 to 10 inches in length. The stem and leaves are hairy. White flowers with dark yellow veins at the base of each of the five petals generally appear in March through May.

Butte County meadowfoam can only be found in Butte County. It is restricted to a narrow 25-mile strip along the eastern edge of the Sacramento Valley, from the central part of the county to the northern portion of the City of Chico. Only 11 known populations remain

today.

Colusa grass (*Neostapfia colusana*) is an annual plant in the grass family that grows 3-12 inches tall. The lower portions of the stems lie on the ground; the upper portions are erect and terminate in dense, cylindrical spikes of florets, somewhat resembling small ears of corn. At maturity the plants exude a sticky substance and have an acrid smell.

Colusa grass grows best in large or deep vernal pools, where there are fewer competitors. It is known from only a few localities in Merced, Stanislaus, Yolo and Solano counties and has been extirpated from Colusa County.

The species was listed as a threatened species in 1997.

Sacramento Orcutt grass (*Orcuttia viscida*) is a bluish-green, densely tufted annual grass reaching about 1 to 4 inches in height. The plant is hairy and covered in a sticky, aromatic, bitter-tasting secretion. The flowering structure occupies the upper one-third to one-half of the stem and consist of numerous, closely spaced spikelets, giving the plant a distinct bristly appearance.

Sacramento Orcutt grass prefers relatively large, deep vernal pools and can only be found in Sacramento County. Seventy percent of the occupied habitat is concentrated into a small area located east of Mather Field.

Sacramento Orcutt grass was federally listed as endangered in 1997.

San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*) is an annual grass that reaches 2 to 6 inches in height. The entire plant is grayish-green due to the long hairs on the stem and leaves. At maturity the plants exude a sticky substance and have an acrid smell.

San Joaquin Valley Orcutt grass occurs primarily in large vernal pools and is restricted to the San Joaquin Valley. Twenty-seven

populations are thought to still be in existence and are located in Fresno, Madera, Merced and Tulare counties. The plant has been completely extirpated from Stanislaus County.

San Joaquin Valley Orcutt grass was federally listed as a threatened species in 1997.

Hairy Orcutt grass (*Orcuttia pilosa*) was listed as an endangered species in 1997. It is a small, densely tufted annual grass. The plant has several stems 2-8 inches tall. Almost the entire plant is covered with soft, straight hairs, giving it a grayish appearance.

Hairy Orcutt grass inhabits relatively large vernal pools situated on stream terraces and alluvial fans in the Central Valley. Of the 38 known occurrences, only 24 remain. These populations can be found in Madera, Merced, Stanislaus, Tehama, Butte and Glenn counties.

Slender Orcutt grass (*Orcuttia tenuis*) is a loosely tufted annual grass 2-8 inches tall. The plants are sparsely hairy and branch only from the upper half of the stem. It is covered in a sticky, aromatic, bitter-tasting secretion.

Slender Orcutt grass occurs in relatively large vernal pools and has also been reported growing in other natural and artificially-created seasonal wetlands such as creek flood plains and stock ponds. Seventy-three occurrences are presumed to remain, all of which are in northern California, primarily in Tehama and Shasta counties. The plant is also found in Siskiyou, Lake, Sacramento, Lassen and Plumas counties. Slender Orcutt grass was listed as a federally threatened species in 1997.

Greene's tuctoria (*Tuctoria greenei*), also known as Greene's Orcutt grass, was listed as an endangered species in 1997. The plant has several stems 2-6 inches tall, each ending in a spike-like flowering structure with a spiral arrangement that may be partly enveloped by the uppermost leaf until fully mature.

Greene's tuctoria grows in moderate sized

vernal pools and the early drying sections of large, deep vernal pools in the Central Valley. Historically there were 39 known occurrences of the plant. Only 20 occurrences are thought to remain today, located in Tehama, Butte, Merced, Glenn, and Shasta counties.

Solano grass (*Tuctoria mucronata*), also known as Crampton's tuctoria or Crampton's Orcutt grass, was listed as a federally endangered species in 1978. It is a small, grayish-green annual grass. It produces stems and leaves covered with droplets of a sticky, aromatic, bitter-tasting secretion. The stems, less than 5 inches long, lie on the ground, turning up only at the tips. This species typically flowers in June and sets seeds in July.

Solano grass is known from only three occurrences: Olcott Lake at Jepson Prairie in Solano County, a vernal lake approximately 2.5 miles southwest of Olcott Lake and another just south of Davis in Yolo County.

Why are these vernal pool species in trouble?

The main threat to the continued existence of these vernal pool species is continuing loss of habitat, especially due to residential or commercial development, water supply and flood control activities, and conversion of lands to agricultural uses. Vernal pool habitat is rapidly diminishing throughout California. This conversion or use of lands containing the remaining vernal pools is expected to continue because of the desirability of and economic feasibility of building on essentially flat lands which are often close to metropolitan areas. Present estimates for the loss of vernal pool habitat in California's Central Valley range from 65-90% of its former extent. In Southern California, San Diego County has documented the loss of 90-95% of its historic vernal pool habitat. Vernal pools also are subject to threats in the form of interrupted watersheds, invasions by aggressive non-native plant species, gravel

mining, fertilizer and pesticide contamination, overgrazing by livestock, off-road vehicle use and contaminated storm water runoff.

What is being done to save these vernal pool species?

The four vernal pool crustaceans gained Endangered Species Act (ESA) protection in September 1994. Conservancy fairy shrimp, longhorn fairy shrimp and vernal pool tadpole shrimp were listed as endangered and vernal pool fairy shrimp were listed as threatened. Eight vernal pool plants received ESA protection in March 1997. Hairy Orcutt grass, Sacramento Orcutt grass and Greene's tuctoria were listed as endangered and succulent owl's clover, Hoover's spurge, Colusa grass, San Joaquin Valley Orcutt grass and slender Orcutt grass were listed as threatened. Solano grass was listed as endangered in September 1978. Contra Costa goldfields was listed as endangered in 1997. Butte County meadowfoam was listed as endangered in 1992.

Since listing of the vernal pool crustaceans and plants, several vernal pool conservation planning efforts have been initiated by public agencies and non-government organizations. For example, in 1997 the Framework Agreement for the Interagency Vernal Pool Stewardship Initiative was signed by a number of Federal and State agencies. This agreement encourages coordination of vernal pool conservation efforts on a regional scale between the participating agencies.

In addition, recovery planning efforts are underway for the vernal pool species. The ESA mandates the preparation of recovery plans for listed species unless such a plan would not contribute to their conservation. Recovery plans detail the actions necessary to achieve self-sustaining, wild populations of listed species so they will no longer require protection under the ESA. A recovery plan is an advisory document. Once the recovery plan is drafted and available

for public review, the Service hopes to work proactively with partners, both private and government, to recover these species.

What's this critical habitat all about?

Q. What is critical habitat?

A. Critical habitat is a term used in the Endangered Species Act. It refers to specific geographic areas that are essential for the conservation of a threatened or endangered species and that may require special management considerations. Areas not occupied by the species may be designated if these areas are essential to the conservation of the species. Critical habitat is determined using the best available scientific and commercial information about the physical and biological needs of the species. These needs include: space for individual and population growth, and for normal behavior; food, water, light, air, minerals or other nutritional or physiological needs; cover or shelter sites for breeding, reproduction and rearing of offspring, and habitat that is protected from disturbance or is representative of the historical and ecological distribution of a species.

Q. Are all 1.7 million acres critical habitat?

A. While we are proposing approximately 1.7 million acres of critical habitat for the vernal pool species, not all the areas within these broad boundaries contain the specific habitat features required by these species and therefore not all areas will require Federal agencies to consult with us. We would require consultations only for actions which affect areas that contain the physical and biological features necessary to the species' survival. For example, existing houses, shopping centers and similar development do not provide specific habitat for the vernal pool species, but in some places are included in the designation because of limitations in our ability to map the boundaries at a finer scale.

Q. Do listed species in critical habitat areas

receive more protection?

A. An area designated as critical habitat is not a refuge or special conservation area. Listed species and their habitats are protected by the Endangered Species Act whether or not they are in an area designated as critical habitat.

Q. Are any of these species protected by state endangered species laws?

A. Yes. Eight of the eleven plants have endangered status with the State of California. None of the vernal pool crustaceans have State status in California, and the vernal pool fairy shrimp has no State status in Oregon.

Q. What protection do the vernal pool species currently receive as listed species?

A. The Endangered Species Act forbids the import, export or interstate or foreign sale of protected animals and plants without a special permit. It also makes “take” illegal-- forbidding the killing, harming, harassing, possessing or removing of protected animals from the wild. Federal agencies must consult with the Service to insure that projects they authorize, fund or carry out are not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of designated critical habitat.

Permits may be issued by the Service for activities that are otherwise prohibited under the Act, if these activities are for scientific purposes or to enhance the propagation or survival of the affected species, or for “take” that is incidental to otherwise lawful activities.

In addition, the Endangered Species Act requires that Federal agencies not only take action to prevent further loss of a species, but also pursue actions to recover species to the point where they no longer require protection and can be delisted.

Q. What is the purpose of designating critical habitat?

A. Critical habitat may benefit listed species by identifying habitat that is essential to their conservation, and by making sure Federal

activities do not affect the long-term survival of the species.

Q. How do you determine what areas to designate as critical habitat?

A. Biologists consider physical and biological habitat features needed for life and successful reproduction of the species. For the vernal pool crustaceans these “primary constituent elements” are those habitat components that are essential for the primary biological needs of foraging, sheltering, reproduction and dispersal. These primary constituent elements are found in areas that support vernal pools or other ephemeral ponds and depressions and their associated watersheds.

The primary constituent elements of critical habitat for the vernal pool plants are those habitat components that are essential for the primary biological needs of germination, growth, reproduction and dispersal. These primary constituent elements are found in areas that support vernal pools, swales or other ephemeral ponds and depressions and their associated watersheds.

All of the primary constituent elements do not have to occur simultaneously within a unit for the unit to constitute critical habitat for one of these species.

Boundaries of the critical habitat units were determined by using geographic information systems (GIS) databases such as occurrence records and other survey reports, vernal pool maps, satellite imagery, and other habitat and landscape information databases. Unit boundaries were determined to include sufficient area to maintain the hydrologic function of the vernal pool complexes within the unit. Developed areas were excluded where feasible.

Units were selected by including areas which had the greatest number of known occurrences and which would represent examples of areas throughout the species range and variations of habitat type.

Q. How will the proposed designation of critical habitat affect Federal agencies that

undertake, permit, or fund projects?

A. Section 7 of the Endangered Species Act requires Federal agencies to consult with the Service on actions they authorize, fund or carry out that may affect critical habitat. Through this consultation process, the Service can ensure that permitted actions do not change (adversely modify) critical habitat in such a way that it appreciably diminishes the value of the habitat for the conservation of the species. We also analyze Federal actions to determine if they may jeopardize the existence of a listed species, regardless of whether those actions also affect the species' critical habitat.

Q. Does the designation of critical habitat create preserves?

A. No. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other special conservation area. It does not allow government or public access to private lands, and will not result in closure of private or state areas to all access or use.

Q. What happens if my private property is designated critical habitat for these vernal pool species?

A. The designation of critical habitat on privately-owned land does not mean the government wants to acquire or control the land. Activities on private lands that do not require Federal permits or funding are not affected by a critical habitat designation. Critical habitat does not require landowners to carry out any special management actions or restrict the use of their land. However, the Act prohibits any individual from engaging in unauthorized activities that will actually harm listed wildlife.

If a landowner needs a Federal permit or receives Federal funding for a specific activity, the agency responsible for issuing the permit or providing the funds would consult with us to determine how the action may affect these vernal pool species or their designated critical habitat. The Service will work with the Federal

agency and the private landowner to modify the project to minimize the impacts.

Q. Is an economic analysis required as part of designating critical habitat?

A. Yes. We must take into account the economic impact of identifying any particular area as critical habitat. We may exclude an area from critical habitat if we determine that the benefits (economic and otherwise) of excluding it outweigh the benefits of including the area as critical habitat, unless the failure to designate the area as critical habitat would result in the extinction of the species. This determination is based on the best scientific, economic and commercial information available. The economic analysis will be completed before the critical habitat designation is finalized. When the draft economic analysis is completed, we will announce its availability with a notice in the *Federal Register*, and we will open a 30 day comment period on the draft economic analysis and proposed rule at that time.

Q. Was an economic analysis prepared when the Service listed these vernal pool species?

A. No. Under the Act, a decision to list a species is made solely on the basis of scientific data and analysis. Critical habitat designation is the only process where economics may be taken into consideration.

Q. Will this proposal be subjected to peer review?

A. Yes, it will. Furthermore, in preparing the proposal the Service solicited input from local species experts throughout California and Oregon on the distribution and status of the species being considered in this proposed rule. Species experts were asked to identify important areas which would be required for survival of the species.

Q. Is critical habitat designated for all listed

species?

A. No. The Service has designated critical habitat for 132 of the 1,233 species currently listed as threatened or endangered. The Act requires us to identify critical habitat at the time a species is listed. However, in some cases, designating critical habitat may be considered “not prudent” if it would cause harm to the species, such as increasing the possibility of collection or vandalism. We may also defer critical habitat designation as “not determinable” for up to a year if we don’t have enough information to define critical habitat at the time of listing. [See ESA Sec 4(b)(6)(C)(ii)]

Q. Why is critical habitat being proposed for these vernal pool species now?

A. When we listed these vernal pool species, we concluded that designation of critical habitat was not prudent because such designations would not benefit these species. We were concerned that critical habitat designation would likely increase the degree of threat from vandalism.

On April 12, 2000, the Butte Environmental Council filed suit in D.C. District Court against the Service for failure to designate critical habitat for the four vernal pool crustaceans. On February 9, 2001, the District Court for the eastern district of California ordered the Service to complete a final critical habitat designation for the four species of endangered or threatened freshwater shrimp by August 9, 2001. Under a settlement between the Department of the Interior and Butte Environmental Council that was approved by the U.S. District Court in Sacramento on July 23, 2001, the Service was ordered to propose critical habitat designations for each of the 4 species of freshwater shrimp and also for 11 listed vernal pool plants, allowing for a minimum public comment period of at least 60 days, and with final designation of critical habitat on or before August 15, 2002

Q. What lands are included in this designation?

A. We are proposing to designate critical habitat

on approximately 1.7 million acres of Federal and non-Federal public lands and privately-owned lands. The majority of areas being proposed for designation is on private land. However, some units are completely or partly within areas such as National Wildlife Refuges, other Federal agency reserves, State preserves or wildlife areas, or private conservation group lands or managed areas. Some units also include commercially managed conservation banks which were developed as compensation for permitted vernal pool losses.

Q. Are Department of Defense installations included in this proposal?

A. Yes. Critical habitat is being proposed on lands on several Department of Defense installations.

Q. What about lands where Habitat Conservation Plans (HCPs) have been approved?

A. HCPs are not excluded from this proposal.

Q. Are Tribal lands included in this critical habitat designation?

A. No Tribal lands are being proposed for critical habitat designation.

Q. How will the final designation of critical habitat affect activities for which a party has already consulted with the Service under section 7 of the Act?

A. Federal regulations require agencies to reinitiate consultation with the Service on previously reviewed actions if critical habitat is designated after the initial consultation, and if those actions may adversely affect critical habitat. This applies only if those agencies have retained some type of involvement or control over the action, or if such involvement is authorized by law. Federal agencies may request to reinitiate consultation with us if a project is likely to affect or adversely modify proposed critical habitat.

Q. What happens if a project is reviewed as part of a reinitiation of consultation and the Service determines it will adversely modify critical habitat?

A. It is highly unlikely that any activity that was reviewed and permitted by the Service under section 7 of the Act, prior to the designation of critical habitat, will be changed because critical habitat is now proposed for the area. When reviewing projects under section 7, we must determine if the proposed action will “jeopardize the continued existence” of a species by asking the question, “Will the project significantly reduce the likelihood of the species’ survival and recovery?” Generally speaking, a project that will “destroy or adversely modify” critical habitat is one that will significantly reduce the value of critical habitat for the survival and recovery of the species. Regardless of whether critical habitat has been designated, we must still consider the effect a project may have on the continued existence or recovery of a listed species.

Q. What types of activities might impact critical habitat for the vernal pool species?

A. Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to the extent that the value of critical habitat for both the survival and the recovery of the vernal pool species is appreciably diminished. Activities that, when carried out, funded or authorized by a Federal agency, may affect critical habitat and require that a section 7 consultation be conducted include, but are not limited to:

- Any activity, including the regulation of activities by the Army Corps of Engineers under section 404 of the Clean Water Act or activities carried out by or authorized by the U.S. Environmental Protection Agency, that could alter the suitability of the watershed, water quality or quantity to support vernal pool crustaceans or vernal pool plants or any activity that adversely affects the natural hydrologic function of the vernal pool system and/or ephemeral pond or depression;
- Road construction and maintenance, right-of-way designation and regulation of agricultural activities, or any activity

funded or carried out by the Department of Transportation or Department of Agriculture that results in discharge of dredged or fill material, excavation or mechanized land clearing of ephemeral and/or vernal pool basins;

- Sale or exchange of lands by a Federal agency to a non-Federal entity which could foreseeably impact the primary constituent elements of critical habitat;
- Regulation, relicensing and operation of damming or other water impoundments by the BOR, Corps, or Federal Energy Regulatory Commission that inundate habitat for vernal pool crustaceans;
- Regulation by the Federal Aviation Administration (FAA) of airport improvement or maintenance activities that could foreseeably impact the primary constituent elements of critical habitat;
- Licensing of construction of communication sites by the Federal Communications Commission on lands containing critical habitat;;
- Funding of construction or development activities by the Department of Housing and Urban Development or other agencies that destroy, fragment or degrade suitable habitat;
- Military training and maneuvers on applicable DOD lands which could foreseeably impact the primary constituent elements of critical habitat;
- Signing of contracts to deliver water by the BOR in situations where those deliveries could foreseeably impact the primary constituent elements of critical habitat; and
- Promulgation of a land use plan by a Federal agency such as the BLM, USFS or DOD that may alter management practices for critical habitat.

If you have questions regarding whether specific activities will constitute adverse modification of

critical habitat in California, contact the Sacramento Fish and Wildlife Office, Endangered Species Division, at 916/414-6600 or write to the office at the following address: U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, W-2605, Sacramento, California 95825. If the critical habitat is located in Oregon, contact the Field Supervisor, Oregon Fish and Wildlife Office, 2600 S.E. 98th Avenue, Portland, OR 97266. Requests for copies of the regulations on listed wildlife, and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Ave, Portland, OR 97232 (telephone 503/231-2063; facsimile 503/231-6243).

Q. Will the public be given an opportunity to comment on proposed critical habitat for these vernal pool species?

A. Yes. We want to ensure that any final action resulting from this proposal will be as accurate and effective as possible. We are actively soliciting comments or suggestions from the public, other governmental agencies, the scientific community, industry representatives, and any other interested party. In particular, we are seeking comments regarding:

- The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the species due to designation;
- Specific information on the amount and distribution of any of the vernal pool crustacean or vernal pool plants and what habitat is essential to the conservation of these species and why;
- Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;
- Any foreseeable economic or other impacts resulting from the proposed

designation of critical habitat, in particular, any impacts on small entities or families;

- Economic and other values associated with designating critical habitat for the vernal pool crustaceans and vernal pool plants such as those derived from non-consumptive uses (e.g., hiking, camping, bird-watching, enhanced watershed protection, improved air quality, increased soil retention, “existence values” and reductions in administrative costs); and
- Whether our approach to critical habitat designation could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concern and comments.

We may revise this proposal to incorporate or address new information received during the comment period. We will hold the public record open for 60 days to allow anyone with information on the proposed designation to participate in this process. When the draft economic assessment is completed we will reopen the comment period for another 30 days to take comments on both the economic assessment and the proposed critical habitat designation.

Q. What about public hearings?

A. The Service will likely hold public hearings on this proposed designation. Information on selected dates and venues for the hearings will be announced at a later date.

More questions?

Please call (916/414-6600) or write to us at:

U.S. Fish and Wildlife Service

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